

QUALIFIED PRODUCTS LIST  
OF  
PRODUCTS QUALIFIED UNDER MILITARY SPECIFICATION  
MIL-P-50884  
PRINTED WIRING, FLEXIBLE AND RIGID-FLEX  
GENERAL SPECIFICATION FOR

This list has been prepared for use by or for the Government in the acquisition of Printed Wiring, Flexible, to the performance requirements of Specification MIL-P-50884. This listing is not intended to and does not connote endorsement by the Department of Defense. All manufacturers listed herein have been qualified under the requirements as specified in the latest effective issue of the applicable specification. This list is subject to change without notice; revision or amendment of this list will be issued as necessary. The listing of a product does not release the supplier from compliance with the specification requirements.

THE ACTIVITY RESPONSIBLE FOR THIS QPL IS THE DEFENSE ELECTRONICS SUPPLY CENTER (DESC-ELS), DAYTON, OH 45444-5764, (513) 296-6225.

Extent of Qualification. Paragraph 4.5.3 of MIL-P-50884 extends qualification for a particular type to cover all conductor patterns of that type produced. Qualification of type 4 products shall be extended to cover all other types. Qualification of type 3 products shall be extended to cover types 2 and 1. Qualification of type 2 products shall be extended to cover type 1. Qualification of types 1 and 5 shall apply only to that type. Qualification of any type shall be extended to cover the approved type with a stiffener or solder mask.

NOTES:

- The QPL format has been changed to separate the adhesive constructions from the adhesiveless constructions.
- The qualification expiration date is the last six digits of the QRN (e.g. mm/dd/yy).
- An asterisk (\*) adjacent to the QRN denotes the product was tested for and meets the etchback requirements.
- A plus (+) adjacent to the QRN denotes that the product tested is manufactured with a flexible metal-clad dielectric covered under a slash sheet(s) other than /1 through /4 of IPC-FC-241. The procuring activity must contact the respective QPL manufacturer to insure that the material used in the manufacturer's process meets their drawing and purchase order requirements. The manufacturer shall be able to provide a Notification of Qualification letter(s) and other official QPL status letters which specify the alternate slash sheet(s) of IPC-FC-241 which may be used for military production.

MANUFACTURER'S NAME (ADDRESSES ON LAST PAGE)	QUALIFICATION REFERENCE NUMBER AND EXPIRATION DATE (MM/DD/YY)	MANUFACTURER'S NAME (ADDRESSES ON LAST PAGE)	QUALIFICATION REFERENCE NUMBER AND EXPIRATION DATE (MM/DD/YY)
<b>TYPE 2</b>		<b>TYPE 4 WITH ADHESIVES</b>	
Advanced Circuit Technology	50884-319-121998	Advance Circuit Systems	50884-492-030197*
Flexible Technology, Ltd.	50884-U008-040496	Advanced Flex 3, Inc.	50884-171-060697*
Litronic Industries	50884-787-072395	Automated Systems, Inc.	50884-111-072297*
Parlex Corp.	50884-347-011799	B-C Electronics, Inc.	50884-913-033197*
Speedy Circuits	50884-382-101497		

MANUFACTURER'S NAME (ADDRESSES ON LAST PAGE)	QUALIFICATION REFERENCE NUMBER AND EXPIRATION DATE (MM/DD/YY)	QUALIFICATION REFERENCE MANUFACTURER'S NAME (ADDRESSES ON LAST PAGE)	NUMBER AND EXPIRATION DATE (MM/DD/YY)
<b>TYPE 4 WITH ADHESIVES</b>			
Computing Devices International	50884-053-063097*	Schoeller & Co. Elektronik GmbH	50884-Z12/95-101298*
Cosmotronics Corp.	50884-096-102897*	Starflex, Inc.	50884-109-040897
Dynaco Acquisition Corp.	50884-113-032199*	Teledyne Electronic Technologies	50884-250-113096*
Eltek, Ltd.	50884-244-091596	Texas Instruments, Inc.	50884-048-032398*
Ferranti International	50884-U012-073097*	Tyco Engineered Systems, Inc.	50884-065-113096*
Flex-Link Products, Inc.	50884-051-102897*		
Flexible Circuits, Inc.	50884-052-060798*	<b>TYPE 4 ADHESIVELESS</b>	
Futura Circuits Corp.	50884-253-071497*	Advanced Flex 3, Inc.	50884-187-120697**
General Components, Inc.	50884-047-051397*	CIMULEC	50884-089-031598**
Graphic Electronics, Ltd.	50884-U011-011097	Computing Devices International	50884-054-052497**
Graphic Research, Inc.	50884-168-063098*	Cosmotronics Corp.	50884-095-042698**
Hamby Corp.	50884-217-061598* 50884-218-011999*	Dynaco Acquisition Corp.	50884-366-012498** 50884-306-022199**
Hans Brockstedt GmbH and Co.	50884-437-052596	Flexible Circuits, Inc.	50884-115-101297**
Hughes Aircraft Co. (1-2)	50884-219-050997	Graphic Research, Inc.	50884-195-042897**
Lockheed Martin	50884-199-082997*	Graphic Research Proto Shop	50884-195-042897**
MBM Technology, Ltd.	50884-U010-011097	Lars Industries, Inc.	50884-024-011198**
Minco Products, Inc.	50884-910-073196*	Litronic Industries	50884-647-073196**
Mommers Print Service, B.V.	50884-071-061498*	Multi Fineline Electronix, Inc.	50884-201-062397**
Nordel S.r.l.	50884-710-103196	P.C.B., Ltd.	50884-191-091997**
Northrop Gruman Corp.	50884-117-111797*	Packard-Hughes, Inc.	50884-064-033197**
P.C.B., Ltd.	50884-072-061596	Parlex Corp.	50884-049-061697**
Packard-Hughes, Inc.	50884-493-100196*	Pentadyne/Pentaflex, Inc.	50884-259-121598**
Parlex Corp.	50884-411-042798*	Pioneer Circuits, Inc.	50884-173-010398**
Pentadyne/Pentaflex, Inc.	50884-916-100196*	Printed Circuits, Inc.	50884-108-090697**
Pioneer Circuits, Inc.	50884-172-010398*	Speedy Circuits	50884-321-082198**
Printca A/S	50884-379-060196	Strataflex Canada Corp.	50884-95504-090598**
Printed Circuits, Inc.	50884-407-032398*	Teledyne Electronic Technologies	50884-154-051697**
Proto Circuit, Inc.	50884-389-120297*	Texas Instruments, Inc.	50884-048-032398**
Proto Systems of Atlanta	50884-237-110197	Tyco Engineered Systems, Inc.	50884-050-022897**
Racaar Circuit Industries, Inc.	50884-729-103197		
Raytheon Co.	50884-197-092297	<b>TYPES 1 &amp; 5 ONLY</b>	
Rigiflex Technology, Inc.	50884-656-103196*	Advanced Circuit Technology	50884-372-093097
Ruwel-Werke GmbH	50884-071-120896*	Labarge Electronics	50884-110-032997

## PART II

The products listed herein are reciprocal based on the NATO Standardization Agreement (STANAG) 4093 or International Standardization Agreements.

The foreign-made products listed in Part II of this QPL have been certified by the authorized inspectorate of the foreign government and by the manufacturer, to be manufactured, tested and qualified in conformance with the applicable foreign specification identified with each product. The products listed in Part II are generally suitable for the function applications ascribed to the U.S.-specified products listed in Part I of the QPL; however, the functional performance limits, reliability and other design characteristics of the products listed in Part II may differ somewhat from those of the U.S.-specified products listed in Part I of the QPL. User agencies, industrial equipment designers, and manufacturers are wholly responsible for examining and evaluating the applicable foreign specifications, design data and product qualification test data to determine the technical suitability of the functional performance characteristics of those products for use in components and equipment specified under U.S. Department of Defense procurement contracts. Products listed in Part II of this QPL should not be selected for use in equipment or systems that are beyond the prototype design and development phase.

NATIONAL DEVICE DESIGNATION	TEST REPORT/ REFERENCE NUMBER	NATIONAL QPL	MANUFACTURER'S NAME AND ADDRESS
Type 4	FTB 003/01 Pt. 2	BS-9764-9765-9766	Flexible Technology, Ltd. Townhead Townhead, Rothesay Isle of Bute, PA20 9JH United Kingdom

MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE	MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE
Advance Circuit Systems, Inc. 174 North Main Street Franklin, NH 03235-1020 Plant: Same Address	0ASS4	Flex-Link Products, Inc. 599 Fourth Street San Fernando, CA 91340-2521 Plant: Same Address	6Z867
Advanced Circuit Technology 118 Northeastern Boulevard Nashua, NH 03062-0547 Plant: Same Address	57034	Flexible Circuits, Inc. Paul Valley Industrial Park Warrington, PA 18976-2580 Plant: Same Address	22928
Advanced Flex 3, Inc. 5400 Opportunity Court Minnetonka, MN 55343-9025 Plant: Same Address	6U461	Flexible Technology, Ltd. Townhead, Rothesay Isle of Bute, PA20 9JH United Kingdom Plant: Same Address	
Automated Systems, Inc. 1505 Commerce Avenue Brookfield, WI 53045-5290 Plant: Same Address		Futura Circuits Corp. 11950 28th Street, N. St. Petersburg, FL 33716-1816 Plant: Same Address	0CA49
B-C Electronics, Inc. 2500 East Shady Grove Road Irving, TX 75060-4689 Plant: Same Address	0PGN6	General Components, Inc. 7425 124th Avenue, N. Largo, FL 34643-3095 Plant: Same Address	61542
CIMULEC Z.I. Les Jonquieres F-57365 Ennery France Plant: Same Address		Graphic Electronics, Ltd. Lords Meadow Industrial Estate Crediton, Devon EX17 1HN England Plant: Same Address	
Computing Devices International Government Systems Division 3101 East 80th Street Bloomington, MN 55425-1640 Plant: Same Address	27963	Graphic Research, Inc. 9334 Mason Avenue Chatsworth, CA 91311-5201 Plant: Same Address	5K529
Cosmotronics Corp. 16721 Noyes Avenue Irvine, CA 92714-5176 Plant: Same Address	63695	Graphic Research Proto Shop Facility 9420 Lurline, Building B, Unit F Chatsworth, CA 91311-5201 Plant: Same Address	
Dynaco Acquisition Corp. 1000 South Priest Drive Tempe, AZ 85281-5238 Plant: Same Address	61642	Hamby Corporation 27704 Avenue Scott Valencia, CA 91355-1218 Plant: Same Address	07284
Eltek, Ltd. P.O. Box 159 Sgoola Industrial Zone 49101 Petach Tikva Israel Plant: Drezner Street 4 Petach Tikva, Israel	S4451	Hans Brockstedt GmbH and Co. Kieler Str. 120 24119 Kiel-Kronshagen Germany Plant: Same Address	
Ferranti International Cairo Mill, Waterhead, Oldham Lancashire OL4 3JA England Plant: Same Address	S5725	Hughes Aircraft Co. (1-2) Missile Systems Group Electronics Products Design Lab P.O. Box 11337, Bldg. 801/C13 Tucson, AZ 85734-1137 Plant: Same Address	15090

MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE	MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE
Hughes Microelectronics Europa, Ltd. Queensway Industrial Estate Glenrothes, Fife KY7 5PY Scotland Plant: Same Address	K5533	Northrop Gruman Corp. Defense Systems Division 600 Hicks Road Rolling Meadows, IL 60008-1098 Plant: Same Address	17920
Labarge Electronics 1505 Maiden Lane Joplin, MO 64801-3819 Plant: Same Address	16275	P.C.B., Ltd. P.O. Box 631 Migdal Haemek, 10556, Israel Plant: Same Address	S5725
Lars Industries, Inc. 2012 15th Avenue Fort Worth, TX 76102-4396 Plant: Same Address	56874	Packard-Hughes, Inc. Interconnect Systems P.O. Box 19685 Irvine, CA 92714-4968 Plant: 17150 Von Karman Avenue Irvine, CA 92713-9685	53669
Litronic Industries 2950 Red Hill Road Costa Mesa, CA 92626-5935 Plant: Same Address	4F972	Parlex Corp. 145 Milk Street Methuen, MA 01844-4699 Plant: Same Address	18377
Lockheed Martin 498 Oak Road Ocala, FL 34472-3001 Plant: Same Address	04939	Pentadyne/Pentaflex, Inc. 711 Fee Ana Street Placentia, CA 92670-2108 Plant: Same Address	0H0H9
MBM Technology, Ltd. Victoria Road Portslade, Brighton, East Sussex BN4 1YH England Plant: Same Address		Pioneer Circuits, Inc. 3010 S. Shannon Street Santa Ana, CA 92704-6387 Plant: Same Address	65723
Minco Products Company 7300 Commerce Lane Minneapolis, MN 55432-3177 Plant: Same Address	09359	Printca A/S Svendborgvej 3, Aalborg, Ost Denmark Plant: Same Address	
Mommers Print Service Peutenweg 2 6101 VZ Echt/Holland The Netherlands Plant: Same Address		Printed Circuits, Inc. 1200 West 96th Street Minneapolis, MN 55431-2606 Plant: Same Address	65114
Multi Fineline Electronix, Inc. 1301 N. Dynamics Street Anaheim, CA 92806-1901 Plant: Same Address	43181	Proto Circuit, Inc. 2035 Midway Drive Twinsburg, OH 44087-1933 Plant: Same Address	7Z463
Nordel S.r.L. Frazione Losa 10070 Pessinetto (Torino) Italy Plant: Same Address		Proto Systems of Atlanta, Inc. 625 Sims Industrial Boulevard Alpharetta, GA 30201-2044 Plant: Same Address	7U718

MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE	MANUFACTURER'S NAME, ADDRESS AND PLANT	CAGE CODE
Racaar Circuit Industries, Inc. 9225-F Alabama Avenue Chatsworth, CA 91311-6901 Plant: Same Address	58521		
Raytheon Company 350 Lowell Street Andover, MA 01810-4499 Plant: Same Address	05030		
Rigiflex Technology, Inc. 3310 W. Harvard Street Santa Ana, CA 92704-3920 Plant: Same Address			
Schoeller & Co. Elektronik GmbH Marburger Strasse 65 D-35083 Wetter/Hassen Germany			
Speedy Circuits Division of PJC Technologies, Inc. 5332 Commercial Drive Huntington Beach, CA 92649-1252 Plant: Same Address			
Starflex, Inc. 662 Clark Road, #13 Tewksbury, MA 01876-9998 Plant: 2 Avco Road Ward Hill, MA 01835-9998	0YHD7		
Strataflex Canada Corp. Division of Strataflex Corp. 11 Dohme Avenue Toronto, Ontario, Canada M4B 1Y7 Plant: Same Address	38661		
Teledyne Electronic Technologies 110 Lowell Road, P.O. Box 68 Hudson, NH 03051-0068 Plant: Same Address	22958		
Texas Instruments, Inc. P.O. Box 149149 12501 Research Blvd., MS 2066 Austin, TX 78714-9149 Plant: Same Address	96214		
Tyco Engineered Systems, Inc. P.O. Box 60 50 Harrison Street Manchester, CT 06040-0060 Plant: Same Address	65416		